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EXAMINER

PATANKAR, ANEETA V

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/533,894 | Applicant(s) MATSUI, MASAKATSU | |
| | Examiner Aneeta Patankar | Art Unit 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-3, 5, 6, and 9-13** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,848,043 to *Takada et al.*

As to **claims 1 and 13**, *Takada* discloses a recording condition setting method of setting record timing conditions of an optical disk device wherein a laser beam pulse is created and information is recorded on a recording surface of an optical disk rotated by a constant angular velocity, the recording condition setting method comprising the steps of and a computer-readable recording medium embodied therein encoded with a computer program for causing a computer of an optical disk device to execute a recording condition setting method, wherein the optical disk device records information on a recording surface of an optical disk rotated by a constant angular velocity, and the recording condition setting method sets record timing conditions of the optical disk device when a laser beam pulse is created and the information is recorded on the optical disk, the recording condition setting method comprising the steps of: acquiring a plurality of setting values of the record timing conditions for a number of group data conforming to a linear velocity of the optical disk at a record position on the recording surface where the information is recorded (Column 7, lines 50-57), where the recording

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timing conditions or clock period "T" is changed with respect to linear velocity "V"; and setting the plurality of setting values for the number of group data to the optical disk device one by one (Fig. 6A-B, column 6, lines 42-49), where the timing chart shows group data values.

As to **claim 2**, *Takada* discloses the recording condition setting method wherein the number of group data include parameters which specify a configuration of the laser beam pulse (Column 9, lines 6-9), where the recording and erase power are the parameters for configuring the laser pulse beam.

As to **claim 3**, *Takada* discloses the recording condition setting wherein the parameters comprise any one or more of a pulse width of the laser beam pulse, a rise timing of the laser beam pulse, and a fall timing of the laser beam pulse (Fig. 4, column 6, lines 28-30), where the graph shows the pulse width of the laser beam pulse.

As to **claim 5**, *Takada* discloses the recording condition setting method wherein the acquiring step is configured so that a plurality of values each depending on a length of a mark area to be formed on the recording surface are acquired with respect to each of the number of group data, respectively (Column 7, lines 50-51), where mark length is dependent on linear velocity.

As to **claim 6**, *Takada* discloses the recording condition setting method wherein the setting step is configured so that each of the plurality of values for the number of group data is set to the optical disk device one by one with respect to each of a plurality of lengths of mark areas (Column 7, lines 50-51), where each bit is set one by one.

As to **claim 9**, *Takada* discloses the recording condition setting method wherein the acquiring step is configured so that at least one of the plurality of setting values for the number of group data is acquired based on a known relation formula which represents a relation between the linear velocity and the setting value (Column 7, lines 50-55), where there is a formula with a relation between linear velocity and one of the setting values, which is clock period "T".

As to **claim 10**, *Takada* discloses the recording condition setting method wherein the acquiring step is configured so that at least one of the plurality of setting values for the number of group data is acquired from results of predetermined operations performed based on a plurality of sets of a known linear velocity and a known setting value (Column 8, lines 45-49), where the known linear velocity values are in the range of V_L and V_h and the setting values are widths α_{iL} , α_{i1} , α_{i2} , and α_{ah} .

As to **claim 11**, *Takada* discloses the recording condition setting method wherein the predetermined operations are either approximation computations or interpolation computations (Column 14, lines 22-30), where the linear velocity V is determined by interpolation between the predetermined V_L and V_h values.

As to **claim 12**, *Takada* discloses a recording method of recording information on a recording surface of an optical disk rotated by a constant angular velocity, by creating a laser beam pulse and using record timing conditions of an optical disk device (Columns 13-14, lines 65-13), where the variable divided pulse technique is done using constant angular velocity, the recording method comprising the step of recording the information on the optical disk using the record timing conditions set up by the recording

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condition setting method (Column 7, lines 52-56), where period "T" is the timing parameter that is used for recording.

3. **Claims 14-16** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,888,781 B2 to *Nishino et al.*

As to **claim 14**, *Nishino* discloses an optical disk device which records information on an optical disk, the optical disk device comprising: a linear-velocity acquiring unit (7) acquiring a linear velocity of the optical disk at a record position on a recording surface of the Optical disk which is rotated by a constant angular velocity (Fig. 1 and 11, column 10, lines 40-56), where the linear-velocity acquiring unit is optical disk controller (7), and the linear velocity is acquired in relation to the angular velocity; a setting-value acquiring unit (7) acquiring a plurality of setting values of record timing conditions for a number of group data, respectively, by retrieving one of a plurality of setting values, which are obtained beforehand for every linear velocity for the number of group data, based on the linear velocity acquired by the linear-velocity acquisition unit (Fig. 1 and 7, column 9, lines 7-10), where the setting-value acquiring unit is optical disk controller (7), where there is a linear velocity value for each channel clock frequency which are recording timing conditions for recording patterns or group data; a setting unit (7) setting the plurality of setting values for the number of group data to the optical disk device one by one (Fig. 1 and 7, column 9, lines 10-15), where the setting-value unit is optical disk controller (7) and it sets the recording patterns or group data; and a recording unit (1) recording the information on the optical disk using each of the plurality

of setting values set by the setting unit (Fig. 1, column 6, lines 31-37), where disk drive (1) includes all the components necessary for recording.

As to **claim 15**, *Nishino* discloses the optical disk device wherein the optical disk is a rewritable optical disk (Fig. 12, column 10, lines 63-65), where the rewrite command is given which makes the disk a rewrite disk.

As to **claim 16**, *Nishino* discloses the optical disk device wherein the rewritable optical disk is in conformity with any of specifications of CD-RW, DVD-RW and DVD+RW (Fig. 12, column 10, lines 63-65), where the rewrite command is given which makes the disk a rewrite disk that falls in one of these groups.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 4, 7, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,848,043 to *Takada et al.* in view of U.S. Patent No. 5,757,735 to *Fitzpatrick et al.*

As to **claim 4**, *Takada* is deficient in disclosing the recording condition setting method wherein the parameters contain the rise timing of the pulse and the fall timing of the pulse, and the setting step is configured so that the plurality of setting values for the number of group data are respectively set one by one with respect to each of the number of group data containing the rise timing and the fall timing.

However *Fitzpatrick* discloses the recording condition setting method wherein the parameters contain the rise timing of the pulse and the fall timing of the pulse, and the setting step is configured so that the plurality of setting values for the number of group data are respectively set one by one with respect to each of the number of group data containing the rise timing and the fall timing (Fig. 1C, column 5, lines 6-8), where the graph shows the parameters of the rise and fall timing of the laser beam pulse.

At the time of invention, it would have been obvious to a person of ordinary skilled in the art to have modified the recording condition setting method as taught by *Takada* by including parameters containing the rise and fall timing of the laser pulse as taught by *Fitzpatrick*. The suggestion/motivation would have been in order to overcoming the ringing effect (*Fitzpatrick*, column 3, lines 42-51).

As to **claim 7**, *Fitzpatrick* discloses the recording condition setting method wherein the acquiring step is configured so that either a plurality of values each depending on a length of a space area immediately preceding a mark area to be formed on the recording surface or a plurality of values each depending on a length of a space area immediately following the mark area are acquired with respect to each of the number: of group data, respectively (Column 9, lines 28-37), where the pattern selector circuit (330) needs to know the length of the space before being able to record a mark. In addition, the same motivation is used as the rejection in claim 4.

As to **claim 8**, *Fitzpatrick* discloses the recording condition setting method wherein the setting step is configured so that each of the plurality of values for the number of group data is set to the optical disk device one by one with respect to each of

a plurality of lengths of space areas (Column 9, lines 28-37), where pattern selector circuit (330) selects the space or mark patterns. In addition, the same motivation is used as the rejection in claim 4.

Response to Arguments

6. Applicant's arguments, see pages 7-8, lines 12-4, filed 9/25/08, with respect to the rejection(s) of claim(s) 1-8, 10 and 12-16 under U.S. Patent Pub. No. 2002/0105873 A1 to *Watanabe et al.* in view of U.S. Patent No. 7,106,680 B2 to *Kato et al.* have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 5,848,043 to *Takada et al.* and U.S. Patent No. 6,888,781 B2 to *Nishino et al.* and U.S. Patent No. 5,848,043 to *Takada et al.* in view of U.S. Patent No. 5,757,735 to *Fitzpatrick et al.*

Applicant firstly argues, with respect to claim 13, on page 7, lines 4-11, that "etc." does not need to be removed from "it [the program] may be recorded on other recording mediums (CD-ROM, a magneto-optic disk, a memory card, a flexible disk, etc.)." and does not agree that the reasoning is because "the computer readable medium can not be an electronic signal or waveform".

Applicant secondly argues, on pages 7-8, lines 23-4, that *Kato* only qualifies as a prior art under 35 U.S.C. 102 (e). Applicant has filed a translation to overcome the priority date of *Kato*. Examiner has therefore, rejected the claims under a new grounds of rejection.

Applicant argues, with respect to claim 1, on page 8, lines 21-25, that *Watanabe* and *Kato* fail to teach "acquiring a plurality of setting values of the record timing conditions for a number of group data conforming to a linear velocity of the optical disk at a record position".

Examiner agrees that both *Watanabe* and *Kato* fail to teach this limitation. However, *Takada* teaches "acquiring a plurality of setting values of the record timing conditions for a number of group data conforming to a linear velocity of the optical disk at a record position" (Column 7, lines 50-57), where the recording timing conditions or clock period "T" is changed with respect to linear velocity "V".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aneeta Patankar whose telephone number is (571) 272-9773. The examiner can normally be reached on Monday-Thursday 8-5, Second Friday, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/
Primary Examiner, Art Unit 2627

/A.P./
12/19/08